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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/704,810	11/02/2000	Paul J. Russell	CIS00-3333	4316

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EXAMINER	
YUSSUF, SAJID	
ART UNIT	**PAPER NUMBER**
2141	

DATE MAILED: 11/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/704,810	RUSSELL, PAUL J.	
	Examiner	Art Unit	
	Sajid A. Yussuf	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 November 2000 and 20 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 November 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/04/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

a. Determining the scope and contents of the prior art.
b. Ascertaining the differences between the prior art and the claims at issue.
c. Resolving the level of ordinary skill in the pertinent art.
d. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. ***Claim 1-14 and 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Simonoff (US 6,463,460) in view of Burch (US 6,751,573).***

4. As per claims 1, 8, and 30, Simonoff discloses a method for processing event information for use by a receiver of the event information (Col. 6, lines 38-56: A whiteboard system in which users can add objects (events) to, wherein the objects are transmitted to the server, where they are retransmitted to the respective computers (receivers) responsive to the respective assigned identifier).

However, Simonoff does not explicitly teach storing the events and the respective timestamps of the events in an event batch; detecting the occurrence of a batch transfer condition; and in response to detecting the occurrence of the batch transfer condition, transmitting the event batch to a receiver, such that the receiver of the event batch can remotely process the events in the event batch.

Burch teaches that nodes each implement a corresponding event time-stamp recorder function, each event when called obtains a time value from the corresponding synchronized clock and writes the time value and an event code provided by the corresponding node application in a corresponding event log as a timestamp record, (See Column 2 Lines 55-64). Furthermore, REF(B) teaches the information recorded in the event logs may be read by any of the node or other nodes reachable via the network. This information may be used to determine a variety of performance indications for the distributed application performed by the node applications, (See Column 3 Lines 9-16).

Therefore it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the teaching of Simonoff with the teachings of Burch to include storing the events and the respective timestamps of the events in an event batch; detecting the occurrence of a batch transfer condition; and in response to detecting the occurrence of the batch transfer condition, transmitting the event batch to a receiver, such that the receiver of the event batch can remotely process the events in the event batch. with the motivation to provide for a distributed system to implement techniques for generating time-stamp records for each of a set of significant events associated with one or more node applications (See Burch Column 2 Lines 1-8).

5. As per claims 2 and 9, Simonoff discloses the claimed invention as described above.

However, Simonoff does not explicitly teach filtering the plurality of event notifications according to an event filter function; and detecting when the event filter function indicates that an event is to be stored in the event batch, thus providing the detection of the events.

Burch teaches in some time critical cases, hardware in a node automatically records a time-stamp for a significant event, for example the time of data collection for a sensor or time of arrival of a network message. This time stamp can be passed to and event timestamp to be stored in an event log, (See Column 5 Lines 35-45).

Therefore it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the teaching of Simonoff with the teachings of

Burch to include detecting a predetermined number of event notifications before indicating that an event is to be stored in the event batch with the motivation to provide for a distributed system to implement techniques for generating time-stamp records for each of a set of significant events associated with one or more node applications (See Burch Column 2 Lines 1-8).

6. As per claims 3 and 10, Simonoff discloses the claimed invention as described above. However, Simonoff does not explicitly teach detecting a predetermined number of event notifications before indicating that an event is to be stored in the event batch.

Burch teaches that in addition, a call to the function by the function is deemed an event of significance in the execution of the corresponding distributed application... and writes the value pair to an entry in the event log as a time stamp record, (See Column 3 Lines 58-67).

Therefore it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the teaching of Simonoff with the teachings of Burch to include detecting a predetermined number of event notifications before indicating that an event is to be stored in the event batch with the motivation to provide for a distributed system to implement techniques for generating time-stamp records for each of a set of significant events associated with one or more node applications (See Burch Column 2 Lines 1-8).

7. As per claims 4 and 11, Simonoff discloses the claimed invention as described above and further discloses creating an event object in response to detecting an action occurring on a sender object (Figure 9B: S21 S25: Mouse Down event or receipt of new object is placed in a wrapper object), wherein the even object specifies event functionality corresponding to the action occurring on the sender object (Figure 7: Actions include for example: "Freehand, Oval, Filled_oval, Rectangle, Text, Image) and an identity of a receiver object upon which to perform the event functionality (Col. 23, lines 16-41: The White Board Server decides whether or not to send to every client based on privilege level).

8. As per claim(s) 5 and 12 Simonoff discloses the claimed invention as described above.

However, Simonoff does not explicitly teach determining that a time difference between occurrences of events exceeds a predetermined value; determining that a predetermined number of events has been stored in the event batch; and detecting that one of the events is a terminating event.

Burch teaches the application is designed such that a call to the function by the function is deemed an event of significance in the execution of the corresponding distributed application. As a consequence, the function calls the event timestamp recorder function near the time of the call to the function, (i.e., determining that a time difference between occurrences of events exceeds a predetermined value), (See Column 3 Lines 40-60). Furthermore, Burch teaches the node application is a web browser and the node application is a web server. The function generates HTTP commands as events and time values for these events recorded by the event timestamp recorder function. HTTP commands received by the node application that require a database access cause the function, a database access function, to be called and timestamp records for these events are recorded by the even timestamp recorder function. Similarly, the event timestamp recorder function records when the function completes a database access and the event timestamp recorder function records when the results are provided back to the function to complete a web browser-web server transaction loop, (i.e., terminating event), (See Column 4 Lines 14-35).

Therefore it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to modify the teaching of Simonoff with the teachings of Burch to include determining that a time difference between occurrences of events exceeds a predetermined value; determining that a predetermined number of events has been stored in the event batch; and detecting that one of the events is a terminating event with the motivation to provide for a distributed system to implement techniques for generating time-stamp records for each of a set of significant events associated with one or more node applications (See Burch Column 2 Lines 1-8), (See Burch Column 2 Lines 45-54).

9. As per claims 6 and 13, Simonoff discloses the claimed invention as described above and further discloses at least one event represents a graphical action performed on an object on a display of a computer system (Col. 16, lines 20-25: a graphic object), wherein the event batch contains a plurality of events that represent a sequence of graphical actions performed on sender objects on the display of the computer system (Adding objects to the white board contains multiple commands and events: Clicking on the object, and dragging and dropping the object on the white board), and wherein the step of transmitting the event batch transmits the event batch to a collaboration adapter for distribution to at least one receiving computer system involved in a collaboration session so that the at least one receiving computer system can recreate events on receiver objects based upon the event batch containing the plurality of events that represent a sequence of graphical actions performed on sender objects which correspond to the receiver objects (Col. 17, lines 39-59; Col. 16, lines 21-40: Once a mouse up event occurs, the wrapper objects inside the vectors are transmitted to the White Board Server for relay to the other active White Board clients).

10. As per claims 7 and 14, Simonoff discloses the claimed invention as described above and further discloses the steps of detecting, generating, storing and transmitting are performed by a processor in a computer system (Col. 8, lines 45-67) performing a real time event capture process (Col. 5, lines 12-24) that operates in conjunction with a browser process (Col. 2, lines 25-63) to capture graphical events (Figure 9B, item S22) as they occur from user interaction with the browser process (Col. 15, lines 55-61; Col 17, lines 39-59).

11. Claims 15-29, and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simonoff in view of Burch and further in view of Logston et al. (US 5,467, 342).

12. As per claims 15, 29, and 31-32, Simonoff-Burch discloses a method for processing event information, wherein the method comprises the steps of receiving an event batch identifying at least one event (Col. 16, lines 21-40), and recreating the events identifies in the event batch (Col. 17, lines 39-59). However, Simonoff-Burch does not explicitly teach calculating a lag time associated with the event batch or compensating for a portion of the lag time required to receive the event batch.

Logston teaches transmitting packets of data containing timestamps through a network, measuring and adding any variable delays to the packet and the value is added to the time of the packet carried in order to compensate for the delays imposed upon that packet as the cells carrying the packets traversed the network (Col. 5, lines 60-67; Col. 6, lines 1-18).

By implementing the calculating of the delay time and compensating for the delay time system of Logston, into the system of Simonoff-Burch, data packets will always be received in order.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Logston in the system of Simonoff-Burch because by implementing the specification as described above, the delays that are experienced while the data stream propagates through the switching nodes of the network are no longer a factor and are resolved (Col. 5, lines 50-56).

13. As per claim 22, Simonoff-Burch discloses a computer system comprising of an input output mechanism (Col. 3, lines 7-16), a processor (Col. 8, lines 54-67; Col. 9, lines 1-3), a memory system (Col. 8, lines 54-67; Col. 9, lines 1-3), an interconnection mechanism coupling the input output mechanism, the processor and the memory system ((Col. 8, lines 54-67; Col. 9, lines 1-3: All the inner working products of a computer system need to be coupled through an interface in order to operate), wherein the memory system is encoded with an even transponder process that, when performed on the processor, causes the computer system to process event information by performing the operations of receiving an event batch identifying at least one event via the input output mechanism (Col. 16, lines 21-

40). However, Simonoff-Burch does not explicitly teach calculating a lag time associated with the event batch or recreating events identified in the event batch while compensating for at least a portion of the lag time required to receive the event batch.

Logston teaches transmitting packets of data containing timestamps through a network, measuring and adding any variable delays to the packet and the value is added to the time of the packet carried in order to compensate for the delays imposed upon that packet as the cells carrying the packets traversed the network (Col. 5, lines 60-67; Col. 6, lines 1-18).

By implementing the calculating of the delay time and compensating for the delay time system of Logston, into the system of Simonoff-Burch, data packets will always be received in order.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Logston in the system of Simonoff-Burch because by implementing the specification as described above, the delays that are experienced while the data stream propagates through the switching nodes of the network are no longer a factor and are resolved (Col. 5, lines 50-56).

14. As per claims 16 and 23, Simonoff-Burch-Logston discloses the claimed invention as described above and further discloses diving the number of events contained in the event batch by the lag time to determine a lag time per event (Logston: Col. 13, lines 20-29) and recreating at least one event identified in the event batch at an event playback time computed by subtracting at least a portion of the lag time per event from an event playback time (Logston: Col. 14, lines 35-45) computed based on a timestamp of the at least one event contained in the event batch (Logston: Col. 12, lines 9-19).

15. As per claims 17 and 24, Simonoff-Burch-Logston discloses the claimed invention as described above and further discloses recreating at least one event identified in the event batch limits the subtraction of the at least a portion of the lag time per event from an event playback time such that an amount of time between consecutive event playback times is a

perceptible amount of time at which events are recreated (Logston: Col. 12, lines 9-19; Col. 143, lines 35-54).

16. As per claims 18 and 25, Simonoff-Burch-Logston discloses the claimed invention as described above and further discloses wherein the event batch is an event batch M and the step of receiving an event batch includes a step of generating a receive time for the event batch M (Logston: Col. 13, lines 30-40: PCR(original), and wherein the step of calculating a lag time required to receive the event batch includes the steps of computing an ideal time for the event batch M (Logston: Col. 13, lines 30-40: TRC (base, extension)), and computing the lag time as a difference between the receive time for the event batch M and the ideal send time for the event batch M (Logston: Col. 13, lines 30-40: PCR(adjusted)).

17. As per claims 19 and 26, Simonoff-Burch-Logston discloses the claimed invention as described above and further discloses wherein the step of computing an ideal send time for the event batch M includes a step of adding a receive time for an event batch M-1 to an amount of elapsed time between a start and end time of the event batch M (Logston: Col.14, lines 38-53: TRCadj = TRCmod + LSCR(tout)).

18. As per claims 20 and 27, Simonoff-Burch-Logston discloses the claimed invention as described above and further discloses wherein the step of recreating events identified in the event batch includes the steps of dividing the lag time by a multiple that is related to a number of events identified in the event batch to determine a lag time per event (Logston: Col. 13, lines 20-38: PCR(adjusted), and for each of the at least one event identified in the event batch, performing event functionality defined for that event on a respective receiver object corresponding to an identity of an receiver object defined for that event in the event batch (Simonoff: Col. 17, lines 38-59), at an event play back time that is computed based on a timestamp associated with the at least one event in the event batch (Simonoff: Col. 17, lines 49-54), and the lag time per event (Logston: Col. 13, lines 20-29).

19. As per claims 21 and 28, Simonoff-Burch-Logston discloses the claimed invention as described above and further discloses wherein the event batch is an event batch other than a first event batch and wherein the method further includes the steps of receiving the first event batch (Simonoff: Col. 17, lines 38-59), recreating events identified in the first event batch at respective event playback times computed based on a respective timestamps associated with each event identified in the first event batch (Logston: Col. 13, lines 20-38: PCR (adjusted), and performing the steps of receiving, calculating and recreating for all event batches other than the first event batch such that events identified in event batches received after the first event batch will be recreated by taking into account lag time required to receive the event batch in which those events are identified (Simonoff: Col. 17, lines 38-59; Logston: Col. 5, lines 60-67; Col. 6, lines 1-18; Col. 13, lines 20-29).

20. As per claim(s) 33 Simonoff-Burch-Logston teaches means for detecting a plurality of events; means for determining respective timestamps of the events; means for storing the events and the respective timestamps of the events in an event batch; means for detecting the occurrence of a batch transfer condition; and means operative upon detecting the occurrence of the batch transfer condition for transmitting the event batch to a receiver, such that a receiver of the event batch can remotely process the events in the event batch, Simonoff: Col. 17, lines 38-59; Logston: Col. 5, lines 60-67; Col. 6, lines 1-18; Col. 13, lines 20-29).

21. As per claim(s) 34 Simonoff-Burch-Logston teaches a means for receiving an event batch identifying a plurality of events; means for calculating a lag time associated with the event batch; and means for recreating events identified in the event batch while compensating for at least a portion of the lag time required to receive the event batch, Simonoff: Col. 17, lines 38-59; Logston: Col. 5, lines 60-67; Col. 6, lines 1-18; Col. 13, lines 20-29).

22. As per claim(s) 35 Simonoff-Burch-Logston teaches receiving an event batch M identifying a plurality of events; generating a receive time for the event batch M; calculating a lag time associated with the event batch M by (1) computing an ideal send time for the event batch M by adding a receive time for an event batch M-1 to an amount of elapsed time between a start time and an end time of the event batch M, and (2) computing the lag time as a difference between the receive time for the event batch M and the ideal send time for the event batch M; and recreating events identified in the event batch M while compensating for at least a portion of the lag time required to receive the event batch M, including, Simonoff: Col. 17, lines 38-59; Logston: Col. 5, lines 60-67; Col. 6, lines 1-18; Col. 13, lines 20-29): dividing the number of events contained in the event batch M by the lag time to determine a lag time per event; and recreating at least one event identified in the event batch M at an event playback time computed by subtracting at least a portion of the lag time per event from an event playback time computed based on a timestamp of at least one event contained in the event batch, Simonoff: Col. 17, lines 38-59; Logston: Col. 5, lines 60-67; Col. 6, lines 1-18; Col. 13, lines 20-29).

23. As per claim(s) 36 Simonoff-Burch-Logston an input output mechanism; a processor; a memory system; and an interconnection mechanism coupling the input output mechanism, the processor and the memory system; wherein the memory system is encoded with an event transponder process that, when performed on the processor, causes the computer system to process event information by performing the operations of, Simonoff: Col. 17, lines 38-59; Logston: Col. 5, lines 60-67; Col. 6, lines 1-18; Col. 13, lines 20-29): receiving an event batch M identifying a plurality of events; generating a receive time for the event batch M; calculating a lag time associated with the event batch M by (1) computing an ideal send time for the event batch M by adding a receive time for an event batch M-1 to an amount of elapsed time between a start time and an end time of the event batch M, and (2) computing the lag time as a difference between the receive time for the event batch M and the ideal send time for the event batch M, Simonoff: Col. 17, lines 38-59; Logston: Col. 5, lines 60-67; Col. 6, lines 1-18; Col. 13, lines 20-29); and recreating events identified in the

event batch M while compensating for at least a portion of the lag time required to receive the event batch M, including: dividing the number of events contained in the event batch M by the lag time to determine a lag time per event; and recreating at least one event identified in the event batch M at an event playback time computed by subtracting at least a portion of the lag time per event from an event playback time computed based on a timestamp of at least one event contained in the event batch, Simonoff: Col. 17, lines 38-59; Logston: Col. 5, lines 60-67; Col. 6, lines 1-18; Col. 13, lines 20-29).

Conclusion

24. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

25. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sajid A. Yussuf whose telephone number is (571) 272-3891. The examiner can normally be reached on Monday-Thursday 7:30-5:00 PM and Alternate Fridays.

27. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

28. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sajid Yussuf
Patent Examiner
Technology center 2100
3 November 2004

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER